Domestic Natural Gas Supply & Demand: The Contribution of Public Lands & The OCS

Subcommittee on Energy & Mineral Resources of the Committee on Resources of The House of Representatives

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I am Matthew Simmons, president of Simmons & Company International, a specialized energy investment bank. I have spent the past 28 years focusing exclusively on energy related investment banking and research. I am a member of the National Petroleum Council and was a member of the Bush-Cheney Energy Transition Advisory Committee. I also am a past Chairman of the National Ocean Industry Association. I served as the Demand Task Force Chairman on the National Petroleum Council's extremely important review of natural gas and the challenges we face in addressing a future market likely to exceed 30 TCF per year.

I commend this committee for holding these hearings today. The current supply-demand balance for North American natural gas is precarious. Over the course of the past year, supply has fallen behind demand despite a significant number of natural gas users abandoning this precious fuel source because its price has soared. To make up this shortfall, the country

has withdrawn record amounts from natural gas storage facilities. The country now has the lowest amount of gas storage in modern history with weeks of cold weather probably still to come before the industry begins the arduous task of trying to re-fill its storage system before the summer air-conditioning gas needs kick in.

Drilling for natural gas is at the highest levels since drilling collapsed in 1982. Yet, thus far, there has been no supply response. Canada is a year ahead of the United States in setting new records for gas drilling, but has also yet to see any supply response.

There is a widespread belief, or at least a hope, that such a supply response will arrive shortly. But a growing number of industry experts, particularly those actually drilling these record number of wells, are beginning to question whether the current rig fleet and acreage available for drilling are adequate to create significant supply additions beyond the

current production base. There is a distinct possibility that five years hence, North America's natural gas supply base will be less than what we enjoy today.

A week ago, the Department of Energy held a two-day workshop to review the natural gas industry today, pursuant to the various assumptions that went into creating the NPC report on natural gas' long term outlook which was published just over a year ago. The findings were grim. Demand is outpacing the NPC estimates while supplies lag. A rig shortage is emerging some five to seven years earlier than the NPC reported envisioned. People shortages are now becoming severe. Access to potential added gas reserves has been even more restricted, particularly with the new roadless policies and the potential challenge to the important upcoming lease sale in the Eastern portion of the Gulf of Mexico.

More troublesome is the fact that more new natural gas-fired power plants are now on order to be on-line by 2002 than the NPC model assumed would be on-stream by 2010! Few have any plans or facilities for any fuel-switching capability. There is growing evidence, or at least strong suspicion, that many of these new gas-fired plants were originally built as merely peaking plants but now will be forced to become defacto quasi-base base load plants in an electricity generation scarcity world.

This adds up to a possible need for up to 30 TCF of natural gas by as early as 2005. Unless a supply miracle soon arrives, the nation's ability to increase its use of electricity is severely threatened. There is a risk that many parts of our country could be short of electricity capacity for up to a decade. Nothing highlights the urgency of finding fresh supplies of natural gas more than the prospect of long term electricity rationing.

The natural gas supply is particularly threatened by increasing evidence that the current supply base is now declining at a rate where half of the current supply will be consumed by 2005. This means that 50%, or 25 BCF per day of new gas production needs to be added merely to keep the current base flat.

THE IMPORTANCE OF OCS RESOURCES

Natural Gas from our Outer Continental Shelf remains the backbone of our domestic supply. Over 13 BCF per day come from these waters, making up about 25% of total domestic supply. 85% of this supply comes from the Gulf of Mexico's shelf. The balance comes from deep water gas. The supply from the shelf has one of the country's highest decline rates. What is now 11 BCF per day will likely decline to only three BCF per day by 2005. Whether this can realistically be replaced by ever higher drilling activity in this mature area is questionable for two reasons. First, the number of

offshore rigs is now at near 100% utilization. Second, the finds each year are diminishing.

Deepwater gas has grown from almost nothing at the start of the 1990's to over two BCF per day today and is projected to grow to as high as five BCF per day by 2005. If these aggressive targets were met, they would still only account for 10% of the U.S. base in 2000. Furthermore, some complex technical issues still remain unsolved. Leading this list is an ability to strip associated gas from deepwater oil and how to transport this dry gas from water depths up to 10,000 feet.

This highlights and underscores the importance of developing the natural gas reserves in the eastern part of the Gulf, an area that has been off-limits to any hydrocarbon exploration for over a decade. The Clinton Administration placed a moratorium on any lease sales in the eastern portion of the Gulf through 2012 with the exception of a block of acreage

planned for leasing this December. Lease Sale 181 is critical to help resolve America's pending natural gas crisis. It is extremely important to prevent Florida and Georgia from also experiencing the awful energy problems now facing California.

FEDERAL LANDS ARE ALSO CRITICALLY IMPORTANT

The Rocky Mountain states represent another critically important gas prone area. But, 40% of their potential gas reserves lie in Federal Lands currently unavailable for any development. Much of the remaining reserves are burdened by cumbersome and lengthy permitting delays and other restrictions.

Alaskan natural gas has suddenly become another critical part of our fragile energy equation. For the past 30 years, Alaskan energy meant simply oil. Now, its potentially vast gas resources are an important

resource. But to get this gas out of the ground, wells need to be drilled in areas beyond the Prudhoe Bay region because much of this area's gas may need to be re-injected to prop up a sagging, old oil production. This puts added emphasis on the importance of opening up ANWR and promptly resolving the pipeline route and considering the possibility of constructing two pipelines so both Alaskan and Beaufort Sea gas can be transported to a gas hungry USA.

The Department of Interior is about to begin a careful and detailed inventory of onshore natural gas reserve potential. This exercise is extremely important but it also needs to be extended to the entire offshore waters of the U.S. Whether any of the potential reserves this inventory might uncover get developed is another issue, but unless an effort is made to test the potential, the country will never know how much natural gas we might have available to curtail a terrible risk to our economy's well being.

Natural gas is the most precious energy source in North America. It is the most environmentally friendly real energy source we have. There is no geo-political risk to this energy supply. But getting it produced is a difficult task, even if all access problems are quickly resolved.

Despite record levels of drilling and remarkable technology advances in safer and more efficient drilling, the amount of exploration wells has fallen to less than 10% of all wells drilled, and the exploration success rate is still less than 35%. This means that 65 of every 100 exploratory wells drilled fail. The cost to drill new wells is rising even though drilling economics are not good enough to justify contractors building new rigs or paying wages high enough to attract a new generation of people to operate the rigs and develop the prospects.

Unless these problems are tackled quickly, America faces a genuine energy crisis that could last for over a decade. Even if the problems of

access are resolved, it might be too late to avoid a crisis for the next several years. But, any delay in resolving all the obstacles to growing fresh gas supplies merely extend and increase the crisis.

As natural gas supply becomes ever more scarce, "energy wars" could erupt between various states reminiscent of the water wars between western states as the Colorado river dam system was created. Texas, for instance, has done a remarkably good job in building ample new gas-fired power plants to safely supply its growing electricity needs. But as these plants come on-line, more and more of Texas' natural gas supply needs to stay within Texas. This will cut-off supplies which other states now take for granted.

These are unpleasant comments to make at such an important congressional hearing but they are real issues and serious issues. I

appreciate the opportunity to share my concerns with this committee and urge all of you to help resolve this crisis.